## **Tobacco Use Status and Counseling**

- Screen at time of diagnosis.
- \* Routine and thorough assessment of tobacco use is an important way to prevent smoking/chewing, prevent use relapse, and encourage cessation in patients of all ages.
- ❖ Providers should assess the level of nicotine dependence to assess probability of success in quitting versus relapse.
- Offer every tobacco user assistance in obtaining cessation treatment.
- ❖ > 20 percent of deaths from CVD can be directly linked to cigarette smoking.
- Smoking cessation can reduce risk of coronary death by 50 percent within 1 year.
- ❖ In 2006, 5.1 percent of BRFSS respondents with diabetes reported being current smokers while 6.4 percent reported using chewing/spit tobacco.

Tobacco use is the leading cause of preventable death in the United States, and is responsible for over 430,000 deaths each year. People with diabetes who use tobacco are at increased risk of both macrovascular and microvascular complications. Recent research has suggested that tobacco use may also increase the risk of developing type 2 diabetes mellitus.

Exposure to secondhand smoke puts non-smokers at risk for developing heart disease (25 to 30 percent), lung cancer (20 to 30 percent), sudden infant death syndrome (SIDS), respiratory problems, ear infections, and asthma attacks in infants and children. Findings from a recent U.S. Surgeon General's report indicate second-hand smoke exposure is a major public health concern for non-smoking Americans, especially those with diabetes. One of the major ways to protect the general non-smoking public from dangerous chemicals emitted through secondhand smoke is to eliminate smoking in public places. Second-hand smoke is responsible for approximately 50,000 deaths per year, with one out of every eight of those deaths being children.

Tobacco cessation is one of the most modifiable life style behaviors that patients can incorporate to decrease the risk of premature death. Studies have established a link between cigarette smoking (tobacco use) and increased morbidity, premature death, and macrovascular complications

### What questions should be included in an assessment?

All patients should be assessed for tobacco use at the time of diagnosis (Figure 6) by using the five A's from the Guideline for Treatment of Tobacco Use and Dependence from the U.S. Department of Health and Human Services:

- ❖ Ask if the patient uses tobacco
- ❖ Advise the patient to quit if they use tobacco
- ❖ Assess the willingness of the patient to quit tobacco
- ❖ Assist the patient in their quit attempt
- ❖ Arrange follow-up for the patient

Questions to consider in assessing the patient should include:

- ❖ How many cigarettes/dips are used daily?
- How soon after awakening does the patient use tobacco?
- ❖ Have attempts been made to guit or to reduce the amount of tobacco used?
- ❖ What are triggers for this patient to use tobacco?
- ❖ Does this patient have a plan in place for quitting? And if not, then the patient should be referred to tobacco cessation services for assistance.

Patients should be encouraged to quit using tobacco at each visit, and if the patient has quit, should be assessed for relapse or potential for relapse at each visit as well.

If not using tobacco:

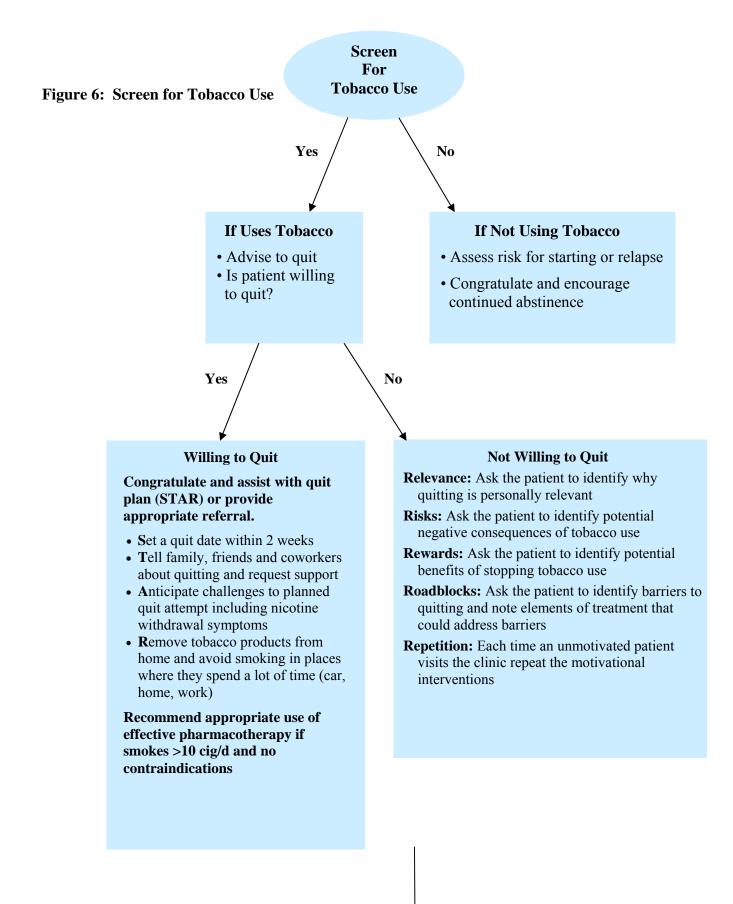
- ❖ Assess risk for starting or relapse
- Congratulate and encourage continued abstinence

## How can a healthcare provider help patients stop tobacco use?

Tobacco dependence is a chronic condition that often requires intervention. However, effective treatments exist that can produce long term or permanent abstinence. Every patient who uses tobacco should be offered one of these treatments, as outlined by the U.S. Department of Health and Human Services. Intervention is based on a patient's willingness to quit. Patients willing to try to quit should be provided with assistance and offered effective pharmacotherapy (nicotine replacement therapy, Bupropion SR, or varenicline). (Table 16) <a href="http://www.surgeongeneral.gov/tobacco/">http://www.surgeongeneral.gov/tobacco/</a>

# What smoking cessation information and programs are available in South Dakota?

The South Dakota QuitLine (1-866-SD-QUITS or 1-866-737-8487) offers a range of services, from individual, pro-active telephone counseling to providing referrals to local cessation classes in the community. Tobacco users can also find out if they are eligible for cessation medication through the South Dakota Quitline. Information regarding the Quitline is available through the South Dakota Department of Health Tobacco Control Program's website at <a href="http://doh.sd.gov/tobacco">http://doh.sd.gov/tobacco</a>.



Arrange Follow-up

Table 16: Adverse Effects, Cautions, and Instructions on Use of Nicotine Replacement Therapy

Type of NRT	Cautions		
All forms of NRT	<ul> <li>Concomitant tobacco use</li> <li>Less than 18 years old</li> <li>Active coronary artery disease including immediate post MI period, unstable angina</li> <li>Life threatening arrhythmias</li> <li>Pregnancy/nursing</li> <li>Stopping smoking can increase blood levels of medications (e.g. Theophylline, clozapine) Check with pharmacy</li> </ul>		
	Adverse Effects	Dosing	Instructions
Nicotine Gum	<ul><li> Jaw pain</li><li> Dyspepsia, nausea</li><li> Caution if TMJ syndrome or poor dentition</li></ul>	<ul> <li>Nicotine gum 2mg (pt smokes &lt; 25 cigs/day) 1 piece q1-2 hr prn up to 12 weeks</li> <li>Nicotine gum 4mg (pt smokes ≥25 cig/day) 1 piece q1-2 hr prn up to 12 weeks</li> </ul>	<ul> <li>Chew slowly</li> <li>Once tingling sensation felt, park gum in between cheek and gum</li> <li>Chew again when tingling goes away</li> <li>No acidic beverages immediately before or after use</li> </ul>
Nicotine Inhaler	<ul><li>Local irritation in mouth and throat</li><li>Caution if history of asthma</li></ul>	• 4mg (1 cartridge) 6-16 times a day prn up to 6 months	<ul> <li>Place plug in two-piece inhaler</li> <li>Pt. inhales on mouthpiece as desired; one plug provides 80 inhalations</li> <li>Use 6 to 16 plugs/day</li> <li>No acidic beverages immediately before or after use</li> </ul>
Transdermal Nicotine Patch	<ul><li>Skin sensitivity</li><li>Sleep disturbance (remove at night)</li></ul>	<ul> <li>Nicoderm CQ 21 mg/d x 4 weeks, then 14 mg/d x 2 weeks, then 7 mg/d x 2 weeks</li> <li>Nicotrol 15 mg/16h x 8 wks</li> </ul>	<ul> <li>Apply to area of skin without hair</li> <li>If problems with sleep disturbance, remove at night and replace in morning</li> </ul>
Nicotine Nasal Spray	<ul> <li>Initial nasal and throat irritation, rhinitis, sneezing, coughing</li> <li>? Dependence</li> </ul>	<ul> <li>One dose = 1 spray each nostril</li> <li>8-40 doses/day prn for 3-6 months</li> </ul>	<ul> <li>Device similar to a nasal steroid spray delivers 1 mg of nicotine to nasal mucosa</li> <li>Rapid high serum levels may help highly dependent</li> </ul>

## Adverse Effects, Cautions, and Instructions on Use of Bupropion SR

### **Type of NRT**

#### **Contraindications and Cautions**

### **Bupropion SR**

- Patients with seizure disorders (contraindicated)
- Patients predisposed to seizures due to bulimia, anorexia nervosa (contraindicated)
- Concurrent therapy with MAIO's, selected antidepressants
- With caution in hepatic dysfunction, end stage cirrhosis
- With caution in medical conditions that may increase seizure risk
  - Severe head trauma or CNS tumor
  - History of seizures
  - Abrupt withdrawal from alcohol, other sedatives
  - Opiate, cocaine, or stimulant addiction
  - Diabetics treated with oral hypoglycemics

Adverse Effects	Instructions
<ul><li>Sleep disturbances</li><li>Dry mouth</li></ul>	• Begin one to two weeks before quit date
	• 150 mg every day for 3 days then 150 mg BID for 7 to 12 weeks (average duration of therapy 8 weeks)

#### Type of NRT

#### **Contraindications and Cautions**

## Chantix (varenicline)

- Not recommended for use in patients under 18
- Has no clinically meaningful pharmacokinetic drug interactions
- Use in pregnancy only if potential benefits justify potential risk to the fetus
- Contraindicated in nursing mothers as drug may be transferred in breast milk
- Physiologic changes resulting from smoking cessation with or without the use of Chantix may alter pharmacokinetics or pharmacodynamics of certain drugs theophylline, warfarin, or insulin
- Nicotine withdrawal may be associated with exacerbation of underlying psychiatric illness; symptoms may include emotional distress, anxiety, depression, irritability, restlessness

#### **Common Side Effects**

#### **Instructions**

- Disturbances in attention, dizziness, sensory disturbance
- Nausea, vomiting, sleep disturbance, constipation, flatulence
- Polyuria
- Menstrual disorders
- Side effects can be minimized or reduced by titrating at a slower rate or leaving a patient at a lower dose, as 0.5 mg BID has still been shown to have a positive effect on tobacco cessation

The patient should set a date to stop smoking. Dosing should start 1 week before the date. Take after eating with a full glass of water.

Recommended dose is 1mg BID following a one week titration:

Day 1-3:
Day 4-7:

Day 8-end of treatment:

0.5 mg BID

1 mg BID

Treatment is for 12 weeks. An additional 12 week course is recommended to further increase likelihood of long term abstinence. Patients who do not succeed or relapse can make another attempt once factors contributing to failure have been identified and addressed.

A maximum of 0.5 mg BID should be utilized in patients with reduced kidney function as varenicline is largely excreted through the kidneys.

As patients abstain from utilizing tobacco, the provider may need to adjust doses of medication such as warfarin that interacts with the P450 system, as nicotine is a potent P450 inhibitor and reduction or removal of nicotine will affect this system.

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